

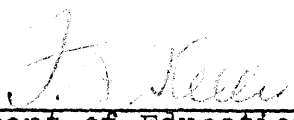
-: METHODS OF RATING TEACHERS : -

By

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CHAPTER I.

- INTRODUCTION -

The teacher is the one factor in any school system which counts most towards its success or failure. Educators and others have consistently realized this fact. They have been loud in their praises of the opportunities and work of the schoolmaster. Standards and ideals have been set up which are almost beyond attainment. So much of the discussion has been of such an idealistic nature that it has largely failed in any attempt to increase the efficiency of the teaching profession.

It has been the very common superstition that personality cannot be resolved into component elements and its contributing factors subjected to the searching analysis of any scheme of measurement. We have felt that human effort and human ingenuity are hindered by any such procedure.

This has been particularly true of the attitude toward the teaching profession. As a result there has been a very indefinite idea of what teaching efficiency consists. School officers have considered the teachers

under their supervision as "Good", "Bad" or "Indifferent", basing the rating entirely on some personal opinion which may or may not have been accurate.

The whole question of what constitutes teaching efficiency has been a very hazy one. This haziness has been a hindrance to the necessary advancement of educational efficiency.

Within recent years studies of qualities of merit and causes of failure among teachers indicate that there are certain factors which enter vitally into teaching success. From the results of these studies, scientific methods of analyzing, evaluating, and improving the qualities of merit are being devised.

The chief purposes of these ratings are for vocational guidance, for improvement of teachers in service, and for determining promotion and dismissal. The whole movement is an attempt to do in a scientific way what has been done so long in a very indefinite and unsatisfactory manner.

This study reviews briefly the following:

1. Studies of qualities of merit and causes of failure among teachers.
2. Studies of methods of rating teachers in cities.
3. Studies of proposed schemes for rating teachers.

4. The question of self-rating.
5. The rating of prospective teachers with a particular study of a rating scheme for use of college faculties engaged in training teachers.

The general studies are based entirely upon the literature on the subject. The material for the particular study was secured from the responses to a questionnaire letter and from the actual study of a rating card for prospective teachers as it was used in the University of Kansas.

CHAPTER II.

- STUDIES OF QUALITIES OF MERIT AND CAUSES OF FAILURE -

1. QUALITIES OF MERIT.

The two earliest studies of qualities of merit deal with the teacher from the point of view of the pupil.

- a. "The High School Teacher from the Pupil's Point of View." ² W. F. Book.

In this study 1,067 high school seniors were asked to write a composition on "High School Education". One of the points to be included was a discussion of "some sympathetic teacher I have had in the high school, or the reverse".

What the pupils say about their teachers is given under three heads: (1) their character, (2) their qualifications, (3) what they did.

1. The favorite teacher's character:

<u>Descriptives used</u>	<u>No. of pupils</u>
a. Kind, forgiving, generous	144
b. Pleasant, cheerful, good-natured, happy, sociable	112
c. Patient, considerate, thoughtful, reasonable, not cranky, not over- particular or unreasonably strict	104
d. Firm, decisive, business-like, strict	59
e. Inspiring, easy to approach	46
f. Serious, earnest, rather dignified, unassuming, and quiet	26
g. Good, polite, courteous, refined)	Given by a few
h. Unselfish, self-sacrificing)	

2. Qualifications described:

- a. Understands pupils.
- b. Enthusiastic, energetic, young.
- c. Interested in work.
- d. Scholarship.
- e. No sex or appearance qualifications made.

3. What the favorite teacher does:

- a. Ready to give pupils right sort of encouragement.
- b. Reasonable, fair, and just in dealings.
- c. Has confidence in students.
- d. "Takes an interest" in pupils outside of school.
- e. Makes work pleasant and interesting.

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In general the author's conclusions are as follows:

1. Pupils demand constant direction and encouragement, which only teachers with certain definite qualifications and qualities of character are able to give.
2. The common virtues and the more fundamental qualifications are the ones which most appeal to high school students.
3. The teacher's ability to understand boys and girls is of primary importance.
4. Boys and girls require different treatment but in the main, they like teachers with much the same characteristics.
5. Sex is not a vital factor.

b. "Characteristics of the Best Teachers as Recognized
by Children." H. E. Kratz.²⁴

Pupils were asked to recall their most helpful teacher and then write answers to the following questions: (1) "In what way did she help you?" (2) "Do you recall any special word or act of hers that greatly helped you? If so, what is it?" (3) "Will you write, in half a dozen sentences, a description of the best teacher you have had without naming her?"

From 2,411 papers, Grades II-VIII, the most common characteristics in Table I. were discovered.³

TABLE I.

		Helped:	Personal:	Good:					
	Num-ber	in Studies	Appear-ance	or Kind	Patient	polite	Neat	Cross	
		Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Percent	
II	404	100	59	53	2	2	2	1	
III	581	100	57	52	4	5	8	2	
IV	511	95	68	63	9	5	11	2	
V	347	85	50	67	16	7	6	3	
VI	245	55	41	55	14	7	4	5	
VII	157	40	74	45	14	2	9	2	
VIII	166	39	64	38	22	3	11	0	
Total	2411	100	58	55	9	7	4	2	

These two studies are valuable in that they were a step toward getting at the real qualities of merit. They are not scientifically accurate because the children whose opinions were summarized were unable to analyze the professional qualities of their teachers. They gave only the personal characteristics of their favorite teacher.

The studies do not attempt to place a value on any quality of merit. Since it is evident that some qualities are of more value than others we are confronted with the question, "How much more?".

c. Qualities of Merit in Teachers.

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Ruediger and Strayer.

This study reports "a preliminary inductive inquiry of a statistical nature into the qualities of merit in teachers". The authors secured data from twenty six schools, getting the general teaching merit and respective ranking in eleven specific qualities. The correlations between general merit and these qualities are given in the following table. The number of cases varied from eighteen to twenty six.

TABLE II.

General Merit and

1.	Experience	.36
2.	Health	.04
3.	Appearance	.20
4.	Initiative	.50
5.	Personality	.46
6.	Teaching Skill	.54
7.	Order	.56
8.	Following sug- gestions	.42
9.	Accord	.38
10.	Studiosness	.44
11.	Social Factors.	.28

The results of this study indicate that "Order", "Teaching Skill", and "Initiative" are factors of first importance in the attainment of teaching success.

d. "Qualities of Merit in High School Teachers."

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Boyce

Stimulated by the investigation of Professors Ruediger and Strayer, Mr. A. C. Boyce, a graduate student in the University of Illinois, conducted a similar investigation of the qualities of merit of secondary school teachers. Mr. Boyce asked superintendents to mark their teachers by relative positions using Prof. Elliott's "Tentative Scheme for Measurement of Teaching Efficiency". A total of 404 teachers from twenty seven school systems were ranked in this manner. Table III gives the rank of each of the specific qualities and the correlation with General Merit.

TABLE III

	<u>Rank</u>	
General Merit and Physical		
1. General appearance	21	.36
2. Health	22	.18
3. Voice	16.	.50
4. Energy and endurance	15	.51
Moral		
1. Self control	13	.52
2. Sympathy-tact	17	.45
3. Adaptability	11	.59
4. Sense of humor	19	.44
5. Fair-mindedness	18	.45
Administrative		
1. Initiative	9	.62
2. Executive capacity	10	.62
3. Co-operation	6	.66
Dynamics		
1. Intellectual capacity	4	.71
2. Instructional skill	1	.90
3. Governmental skill(discipline)	5	.67
4. Studiousness	7	.65
Achievement		
1. Success of pupils (results)	2	.85
2. Stimulation of individuals	3	.80
3. Stimulation of community	14	.52
Social Spirit		
1. Interest in life of school	8	.64
2. Interest in life of community	12	.57
Experience	20	.43

The leading qualities of merit judged from this study are "Instructional Skill", "Results", "Stimulation of Individuals", and "Intellectual Capacity".

2. CAUSES OF FAILURE.

a. There are a few significant studies of causes of failure among teachers. The first, by Miss Moses³² in 1912 concerns the causes of failure among high school teachers in seventy six school systems from thirty one states. The classification of causes, together with the frequency of each appears in Table IV.

TABLE IV.

<u>Rank</u>	<u>Causes of Failure</u>	<u>Number of Failures</u>	<u>Percentage of total</u>
1	Poor Instruction	43	20.97
2	Weakness of personality	35	17.07
3	Lack of interest in work	30	14.53
4	Weakness in discipline	26	12.68
5	Lack of sympathy	20	9.75
6	Inability to cooperate	14	6.82
7	(Unprofessional attitude	12	5.85
	(Weakness in knowledge of subject matters	12	5.85
8	Disloyalty	7	3.41
9	Immorality	4	1.95
10	Poor health	2	.97
	Total	205	99.85

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b. Mr. Sherman Littler in a similar manner conducted an investigation of the causes of failure among elementary teachers. His findings closely parallel those of Ruediger and Strayer and Miss Moses. In order of importance the causes of failure are:

1. Poor Discipline
 2. Weak Personality
 3. Lack of Teaching Skill
 4. Lack of Interest
 5. Lazy - No Daily Preparation
 6. Failure to cooperate
- Last - health

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c. Superintendent Henry Buellesfield of Forest Park

Illinois secured data of failures from 116 school systems employing 4,848 teachers, in various parts of the United States. The correspondents were asked to mark the causes 1, 2, 3, and so on, in order of their importance. The results of his study are given in Table V.

TABLE V.

	Chief Cause	Contributory Cause	Total
Weakness in discipline	114	54	168
Lacked judgment	45	86	131
Deficient in scholarship	42	40	82
Poor methods	41	79	120
Daily preparation insufficient	23	51	74
Lacked industry	19	28	47
Lacked sympathy	17	45	62
Too nervous	15	30	45
Deficient in social qualities	15	27	42
Unprofessional attitudes	14	28	42
Unattractive appearance	12	29	41
Poor health	12	13	25
Lacked culture and refinement	11	28	39
Uninterested in work of teaching	10	26	36
Too many outside interests	10	23	33
Immoral	10	1	11
Too frivolous	9	17	26
Disloyalty	9	16	25
Could not control temper	7	23	30
Deceitful	7	19	26
Untidy in dress	7	14	21
Remained too long	5	17	22
Too immature	3	13	16
Wrong religious views(for that community)	2	3	5
Attended places of questionable amusement	1	8	9
Keeping company with high school boys	1	0	1
Use of tobacco	0	1	1

d. Mr. Elmer L. Ritter³⁶ gathered data which covered 1,765 individual teachers from 14 different school systems scattered over the northern half of Indiana. His results are included in Table VI.

Table VI gives a summary of studies on qualities of merit and causes of failure. There is a very close agreement of ranks of the various qualities, whether they are studied from the positive or negative side. There are certain qualities which sustain a close relationship to what is termed "general merit". These qualities are teaching skill, power to discipline, personality, initiative, studentship, and tendencies toward cooperation.

TABLE VI.

Reasons for Failure³⁶

(Numbers indicate rank)

	Ruediger	Buelles-	28:	*	36
	and	field 6:	Littler	Anderson:	Ritter
	Strayer ³⁹				
:Discipline	1	1	1	1	1
:Teaching skill:					
:and training	2	3	3	2	2
:Personality	4	--	2	3	3
:Initiative and:					
:Interest	3	4	4	7	4(?)
:Laziness	5	--	6	--	5(?)
:Ill health	Last	5	Last	--	Among
:					last

* Anderson: Selection of Public School Teachers (Thesis)
State University of Iowa, 1916.

CHAPTER III.

- METHODS OF TEACHER RATING -

1. Proposed Schemes for Rating Teachers.

The teacher at work is the teacher in whom the greatest interest is centered. As an aid to the scientific determination of the merit of teachers a number of significant schemes for rating teachers have been proposed and are being quite extensively used. In addition to these schemes there are many others which are used in only one school system. Superintendents have been impelled from need to devise some scheme for teacher rating. In any study of this kind it is imperative that a review be made of those schemes devised and of the studies that have been made of current practices.

One of the prominent schemes for teacher rating is "The Efficiency Record", proposed by A. C. Boyce.

a. "Efficiency Record" - Boyce³

While a student in the department of education at the University of Illinois, Mr. Boyce began a study of methods of measuring teaching efficiency. He continued the work later while a student and assistant in the same department at the University of Chicago. His work was one step in the process of applying methods of very careful investigation to the study of an important practical phase

of school administration. The results of the study are published in the Fourteenth Yearbook of the National Society for the Study of Education, Part II.

Mr. Boyce's aim was to devise a rating scheme which included (1) a careful selection of factors, (2) a careful definition of terms, and (3) the best method of scoring judgments.

The forty five topics included in the "Efficiency Record" were chosen somewhat arbitrarily from a much larger list. The items are grouped under five main heads: I, Personal equipment involving such items as general appearance, health, initiative, self-control and tact; II, Social and Professional Equipment, including preparation, attitude toward school and community, professional interest and growth; III, School Management, including care of room and children; IV, Technique of Teaching; and V, Results, measured by response and development of pupils, and influence in the community. Each term is carefully defined so that there need be no error due to definition.

The method of recording the rating officer's judgment has much to do with the effectiveness of any scheme. The "Efficiency Record" was so devised that it permits of quick and easy analysis of the teachers strong and weak points. The scoring is recorded graphically on a five-division

scale opposite each quality of merit. The divisions are Very Poor, Poor, Medium, Good, and Excellent. The line is divided into ten equal spaces arranged in groups of 1, 2, 4, 2, and 1 spaces each, under the five main divisions. This arrangement was suggested by the curve of probability.

The rating officer in recording his judgment places a small cross (x) in that space which indicates his judgment of each quality. The result is a graphic presentation of the supervisor's estimate of the teacher in question. This is termed the Detailed Rating.

Below the list of factors is a line calling for a General Rating. This is the officers own judgment of the teacher's general merit after he has completed the Detailed Rating. It is recorded in the same way as the rating in any particular factor.

In testing this scheme it was used by between forty and fifty school men and women rating four hundred twenty four teachers from thirty nine school systems. These schools were representative of twenty seven cities, all but eight of which are in Illinois.

The results of this experiment are:

- "1. The ratings show clearly the possibility of expressing by the graphical method all shades of excellence and all combinations of specific kinds of excellence in teachers.

- "2. With slight variations principals are able to get the same results at two different times without reference to the first record made.
- "3. Different judges of the same teacher are able to obtain results varying from each other less than three spaces of the scale.
- "4. Comparability of ratings from different schools is lessened by differing standards of excellence from school to school and by differing abilities to discriminate on the part of school officers.
- "5. If results from different schools are to be made thoroughly comparable the judges must be trained to a common standard of excellence and be given a common fund of knowledge as to what constitutes excellence in teaching.
- "6. Tests show that the use of an analytical blank of this kind may raise or lower judgments previously formed. General impressions and unanalyzed judgments are not reliable."

The next step in completing the rating device was to obtain an accurate estimate of the values of the qualities of teaching merit there set forth. These estimates were derived from the results of the ratings of the teachers mentioned above. The rating officer was not asked to give his opinion as to the relative importance of any of the

qualities. In each case he rated the quality, Very poor, poor, Medium, Good, or Excellent, with variations as he saw best. At the end of this series of judgments he summed up those qualities and recorded a grade representing the teacher's general merit. In recording this last rating the supervisor had given incidentally his idea of the importance of the several qualities. The amount of emphasis he put on any factor was measured by the degree of correspondence between the two series of ratings.

Correlations of the specific qualities with general merit were determined. "Results" and "Technique" of teaching ~~and~~ were found to be most closely related to general merit. The qualities least associated were Professional and Academic Preparation, Health, General Appearance, and Voice. These results confirm those obtained by other studies as to the importance of the teacher's technique and ability to get results.

Table VII gives the "Record" as it was completed with the ranks of the several qualities and their correlations with "General Merit".

The Boyce Efficiency Record seems to be the most scientifically devised and carefully tested of any scheme so far submitted to educators. It has received wide attention and consideration of those interested in the betterment of the teaching staff.

TABLE VII.EFFICIENCY RECORD

<u>Detailed Rating</u>		<u>Rank</u>	
I. Personal Equipment	:1 General Appearances	.47	43
	:2 Health	.56	39
	:3 Voice	.53	42
	:4 Intellectual Capacity	.62	34
	:5 Initiative and self-reliance	.77	13
	:6 Adaptability and resourcefulness	.80	11
	:7 Accuracy	.74	17
	:8 Industry	.69	24
	:9 Enthusiasm and optimism	.71	22
	:10 Integrity and sincerity	.63	33
	:11 Self control	.66	30
	:12 Promptness	.66	29
	:13 Tact	.69	25
	:14 Sense of justice	.61	36
II. Social and Pro- fessional Equipment	:15 Academic preparation	.41	44
	:16 Professional "	.38	45
	:17 Grasp of subject matter	.72	19
	:18 Understanding of children	.76	15
	:19 Interest in life of the school	.65	31
	:20 " " " " community	.62	35
	:21 Ability to meet and interest pa-	.61	38
	:22 Interest in lives of pupils(rons	.69	26
	:23 Cooperation and loyalty	.66	29
	:24 Professional interest and growth	.72	18
III. School Manage- ment.	:25 Daily preparation	.68	27
	:26 Use of English	.56	40
	:27 Care of light, heat & ventilation	.61	37
	:28 Neatness of room	.54	41
	:29 Care of routine	.64	32
	:30 Discipline(governing child)	.79	12
	:31 Definiteness and clearness of aim	.81	10
IV. Technique of Teaching	:32 Skill in habit formation	.86	5
	:33 Skill in stimulating thought	.84	8
	:34 Skill in teaching how to study	.84	7
	:35 Skill in questioning	.72	20
	:36 Choice of subject-matter	.85	6
	:37 Organization of subject-matter	.87	3
	:38 Skill and care in assignment	.82	9
	:39 Skill in motivating work	.74	16
	:40 Attention to individual needs	.76	14

	: 41	Attention and response of class	.86	4
	: 42	Growth of pupils in subject-matter	.87	2
V. Results	: 43	General development of pupils	.88	1
	: 44	Stimulation of community	.70	23
	: 45	Moral influence	.71	21

b. "A Tentative Scheme for the Measurement of Teaching
Efficiency". - Elliott ¹⁵

This scheme was first submitted in 1910. The plan
was revised in a few minor details in 1914.

Mr. Elliott supports his scheme on certain working
principles: ^{16a}

1. "The purpose of any teaching efficiency scheme is
to serve as the means of promoting development and
improvement of the individual teacher.
2. "The content-basis of any teaching efficiency scheme
should be the results of co-operative determina-
tion between the members of a teaching staff and
the supervisors.
3. "The content-basis should attach primary importance
to objective items representing those results of
teaching capable of objective valuation rather
than to contributory personal factors.
4. "Each item ^{that} enters into estimate of any teacher
should be carefully defined.
5. "The original estimate of fitness should be made
by the teacher.

6. "This original estimate should be subject to correction only after conference between teacher and supervisor.
7. "At least once each year the verified and modified estimates should be made a matter of definite record."

The Elliott scheme conceives the teacher as an octo-personality. There is a physical teacher, a moral teacher, an executive teacher, a professional-technical teacher, a projecting teacher, a social teacher, a supervisory teacher, and, finally, an achievement teacher.

In the score card for rating, one thousand points are distributed among the eight main headings. A number of qualities are listed under each major heading and each is given a suggestive value. Instructions are given for deduction from a possible ten. The same proportions are to be used for totals larger than ten. The "Total Efficiency" is the sum of all the values assigned to the several factors.

Mr. Elliott states specifically that this plan "will be of the greatest service if placed directly in the hands of teachers for their own guidance, and as a basis for a co-operative effort between teachers and supervisors." The plan is not intended to be used as a score card by inspectors.

PROVISIONAL PLAN
for the
MEASURE OF MERIT OF TEACHERS.

Edward C. Elliott
The University of Wisconsin.

General Instructions.

Deduct from possible 10; very slight, 2; slight, 4; marked, 6; very marked, 7; extreme, 8. (Possible 20, 40, 60, 80, or 100, in same proportion).

Total efficiency = Total Individual Efficiency plus Total directed Efficiency.

Minimum standard for approval; according to the standards and exigencies of the school or school system.

Individual Efficiency-800 Units	Suggested Values	Deficiencies	Determined values
I. Physical Efficiency - 80 units	(80)	----	----
1. Impressions-general.....	10	----	----
2. Health-general	20	----	----
3. Voice	20	----	----
4. Habits-personal	10	----	----
5. Energy and endurance; power of relaxation..	20	----	----
II. Moral -Native Efficiency-100 units	(100)	----	----
1. Self-control.....	20	----	----
2. Optimism-enthusiasm.....	20	----	----
3. Sympathy-tact	20	----	----
4. Industry-sense of responsibility	10	----	----
5. Adaptability.....	10	----	----
6. Sense of humor.....	10	----	----
7. Judicial mindedness	10	----	----

PROVISIONAL PLAN- Continued

Individual Efficiency-800 Units	Suggested Values	Deficiencies	Determined Values
III. Administrative Efficiency- 80 units	(80)		
1. Regularity at post of duty....	10	----	----
2. Initiative; resourcefulness....	20	----	----
3. Promptness and accuracy.....	10	----	----
4. Executive capacity.....	20	----	----
5. Economy (time, property).....	10	----	----
6. Co-operation (associates and superiors....)	10	----	----
IV. Dynamic Efficiency-180 units	(180)		
1. Preparation. Including: (a) intellectual capacity; (b) academic education; (c) pro- fessional training; (d) com- mand and use of English....	20	----	----
2. Professional attitudes and interest.....	10	----	----
3. Human nature, attitudes and interest (Appreciation of values-physical, intellec- tual, social, and moral, in child life).....	10	----	----
4. Instructional skill.....	80	----	----
5. Responsiveness to directions and suggestions.....	20	----	----
6. Govermental and directive skill (discipline).....	40	----	----
V. Projected Efficiency-50 units	(50)		
1. Economical oversight of pupils not immediately under in- struction.....	10	----	----
2. Continuing preparation..... (a) Daily; (b) weekly; (c) annual	10	----	----
3. The school program.....	10	----	----
4. Increase of professional e- quipment (professional asso- ciation, study and reading; travel).....	20	----	----

PROVISIONAL PLAN - continued

Individual Efficiency-800 Units	Suggested Values	Deficiencies	Determined Values
VI. Achieved Efficiency-250 Units	(250)		
1. Respect of pupils and community.....	30	----	----
2. Leadership; stimulation of individuals and community.	30	----	----
3. School achievement			
(a) Responsiveness of pupils; readiness and accuracy..	30	----	----
(b) Illustrative results.....	80	----	----
(c) Examinations; rate and amount of progress of pupils.....	80	----	----
VII. Social Efficiency-60 units	(60)		
1. Intra-mural interests.....	30	----	----
2. Extra-mural interests.....			
(a) Cultural and ethical.....	10	----	----
(b) Civic.....	10	----	----
(c) School-patrons.....	10	----	----
Total Individual Efficiency	800	----	----
Directed Efficiency-200 Units			
I. Supervisory Efficiency-200 Units	(200)		
1. Constructive criticism.....	40	----	----
2. Non-interfering supervision.	40	----	----
3. Community encouragement	40	----	----
4. Professional confidence.....	40	----	----
5. Recognition of individuality..	40	----	----
Total Directed Efficiency.....	200	----	----

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c. "The Rating of Teachers in Indiana" - Ritter

The Indiana system of giving success grades to teachers is one of the very simplest rating schemes in use. Every teacher who has taught in the state must have a success grade. The supervisor or superintendent in the city, and the county superintendent in the county is required by law to give each teacher, by the first of July, the grade which represents his work for the previous school year. Another copy is filed for permanent record.

The teacher is rated on three general items. Out of a total of one hundred points, Teaching Power is given forty five per cent; Government, thirty five per cent, and General Characteristics, twenty per cent.

The law concerning success grades describes the principle of teaching power as the preparation of the lesson, skill in presentation, and results. The teacher's power in government is shown in the general spirit of the school and in the general attitude the pupils take toward each other and toward the school property. The general characteristics are the "personality of the teacher, professional and community interests, and all those qualities that make for the best citizenship".

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d. Superintendent E. C. Witham of Southington, Connecticut has devised a very elaborate scale for teacher measurement.

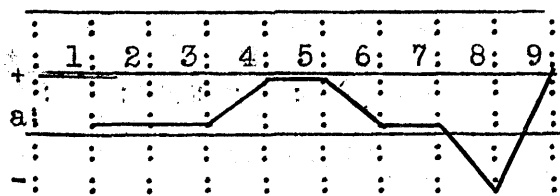
His object as stated is the reduction of guess work in the rating of teachers in schools. A conscientious teacher can apply the teacher measurement to himself and by a careful checking process be able to find his weak points. Three ratings are given, plus (+) the highest, average (a), and the lowest (-).

A total of forty six qualities, personal, professional, academic, and social are listed. Since there are three possible ratings for each quality, there must be three degrees of excellence. These are carefully defined for each of the forty six, e.g.,

1. Morals (+ Uplifting influence on others.
(a Upright but not influential
(- Questionable character.
2. Leadership (+ Among students and community
(a Among students only
(- Lacking

etc.

The ratings are recorded on a graph sheet, on which numbers represent the factors. A line is drawn from one rating to the following, making a picture of the teacher's record:



In this partial record, the teacher is rated a in factors 1, 2 and 3; + in factors 4 and 5; a in factors 6 and 7; - in factor 8, etc.

e. "A Score Card Method of Teacher-Rating"

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Landsittell

This score card, largely the work of Mr. F. C. Landsittell was proposed for the use of the state high school inspectors attached to the Department of Public Instruction of Ohio. The values assigned to the factors were the result of the combined judgment of ten persons on the scheme. To improve the reliability of the scheme, Mr. Landsittell sought the judgment of a considerable number of competent persons from various parts of the United States.

These judges were asked to distribute 1000 points among the five main topics: I. Personal Appearance, II, Scholarship, III Method, IV Pupil Reaction, V Attention to Room Conditions. They were further asked to number in order of importance the minor attributes appearing in each group, e.g.:

I. Personality - () Poise, () leadership, () Appearance, () open-mindedness, () health, animation, () human-nature attitudes.

From eighty seven replies the medians of weights assigned to the major topics, adjusted to the nearest five, were taken as the final weightings for the several factors. For the minor topics the ratings returned for each item were added and the reciprocals of the sums resulting in each major group were taken as the proportion in which the weight belonging to the major heading of that group should be divided.

Adjustments were made to the nearest five.

SCORE CARD - Landsittell

I. Personality - 250.	
1. Appearance	30
2. Poise	35
3. Health, animation	35
4. Judicial sense	35
5. Moral-social and religious interests	35
6. Professional spirit	35
7. Aggressiveness, initiative	45
II. Scholarship - 220.	
1. General	45
2. Special	35
3. Professional training	50
4. Command of English	45
5. Scholastic ideals	45
III. Method - 205.	
1. Selection and organization of subject matter	45
2. Skill and judgment in questioning	35
3. Facility in exposition	30
4. Mental concentration	30
5. Conclusiveness, thoroughness	20
6. Economy	20
7. Assignment	25
IV. Pupil Reaction - 220.	
1. Command of subject-matter	40
2. Completeness and correctness of expression	30
3. Using knowledge	30
4. Tastes and appreciations	25
5. Democratic self-control, initiative	45
6. Spirit of inquiry and endeavor	30
7. Special skills	20
V. Room Conditions - 105.	
1. Arrangement, order	25
2. Attractiveness	30
3. Controllable hygienic factors	50

SCORE CARD - continued

VI. Counteracting factors - 100.	
1. Unfavorable social environment	15
2. Depressing professional relations	15
3. Deleterious hygienic or affective conditions	25
4. Temporary physical inability	20
5. Inferiority of pupils	25

f. The New York Bureau of Municipal Research made use of a very elaborate score card³ in some of their investigations.

This card has two main headings, I Personality of the Teacher and II the Recitation.

The rating is made by checking the qualities under the main topics which most nearly describe the teacher.

I. Personality of the Teacher (Check)

1. Teacher appears to be

vigorous..... weak

poised nervous

etc.

2. Voice is

pleasing harsh

etc.

3. In her personal relations with pupils does she appear

to stimulate.... to suppress....

to be sympathetic.... harsh

strict.... lax

etc.

II. The topics under "The Recitation" are concerned with the attitude and responses of pupils in the class; the attitude of those not reciting; time lost; teaching ability as indicated by the questions asked; the material and method of recitation; the assignment, and method of correction of errors.

This score card has been used widely for the improvement of teachers. Each teacher rates himself. It is also used as a basis of supervisory criticism.

1

g. The scheme of measurement based on the Ohio state school survey is a very extensive and minute method of teaching merit. The judgments are recorded in written answers to questions or by checking qualities. It includes the outline used by the New York Bureau of Municipal Research and adds other factors concerning the physical conditions affecting instruction, the work done by pupils, qualifications and experience of teacher, records and reports, and health regulations.

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h. J. S. Taylor District Superintendent of schools in New York City submitted, a few years ago, a plan for rating teachers which he had been using for ten years. There are five main topics with subtopics under each. The system of grading is five letters, A, B+, B, C and D.

1. Teaching ability

(Subtopics of special subjects)

2. Scholarship

3. Effort
4. Personality
5. Control of class

For the kindergarten teacher, Mr. Taylor included another list of items, classified under the following heads:

1. Nature interests
2. Language
3. Music
4. Games
5. Handwork

2. Studies of Methods of Teacher Rating.

a. The first study of importance concerning the present methods of measuring teaching efficiency was made by Mr. A. C. Boyce³. Replies from 242 cities of the United States furnished the information as to methods used. In general the methods are two: examination and rating. Mr. Boyce gives the following summary of the relative importance of the two methods.

	Number of Cities Reporting
1. Promotional examinations	14
2. Schedule of qualities on which teachers are judged	133
3. Efficiency grade for teachers	99
4. Judgment of teachers not controlled	98

The purposes served by examinations are (1) to determine entrance into service, (2) to control promotion of teachers from one salary group to another or from present positions to those more responsible, and (3) to stimulate continued study on the part of the teacher.

Mr. Boyce's conclusions concerning the value of examinations are that they are negatively valuable in eliminating weak candidates. He further says that it cannot be maintained with confidence that they are positively valuable in determining the relative merit of teachers.

The more common method of determining teaching efficiency is some kind of rating by one or more school officers.

Methods of rating fall into two classes, the general impressions method and the analytical method. The first can scarcely be called a method. In most cases there is a very indefinite procedure. The rating is uncontrolled and depends entirely upon the officer who is in charge. There is nothing to tell what the judgment really means.

The analytical methods reported fall into four general types:

1. Descriptive reports involving a written statement, by the supervisory officer.

2. A series of questions answerable by "Yes", "No", or a brief statement of fact.
3. The teacher is given a grade in each of a few specified items. The marks are usually the initial letters of the words, Excellent, Good, Medium, and Unsatisfactory.
4. A fourth type is one in which a definite value is assigned to the qualities listed and subtractions are made from the maximum in proportion to the deficiency.

In a study of the qualities listed in fifty rating schemes, Mr. Boyce finds the following twenty five mentioned most frequently:

Qualities	Frequency
Discipline	49
Instructional Skill	30
Scholarship and education	29
Co-operation and loyalty	30
Plan and method	29
Personality	20
Professional Interest	16
Manner	15
Voice	14
Daily preparation	13
Accuracy and promptness	12
Professional training and preparation	12
Attitude toward criticism	12
Appearance	11
Health	11
Routine	11
Teacher's growth and improvement	10
Attitude toward work	10
Attitude toward pupils	10
Character	9
Tact-sympathy	9
Skill in questioning	9
Personal influence	9
Housekeeping	8
Results	8

The marks are usually initial letters of words describing teacher merit, or are A, B, C, etc., or 1, 2, 3, etc. A few use percentages, answers to questions, or descriptive adjectives. In fifty four schemes the number of ranks used was as follows:

2 ranks	.....	2
3 ranks	.....	11
4 ranks	.....	24
5 ranks	.....	12
6 ranks	.....	4
7 ranks	.....	1

Teachers were rated principally for the following reasons: (1) for the private information of the superintendent; (2) for the purpose of furnishing a basis of salary adjustment, or to control salary adjustment; (3) for use in connection with other factors, such as length of service, examination, or special work to determine promotion; (4) to improve the teachers in service.

b. A study was made in 1916 of the methods of teacher rating in the cities of the United States of over 150,000 population.²¹ Replies were received from twenty seven of the thirty two to whom questionnaire letters were sent asking for forms or general plans used in teacher rating. The schemes used in four of the cities not replying were learned from other sources.

The methods of these cities fall roughly into four classes:

- I. The first class composed of eleven cities used no rating forms. In Chicago stress is put on successful experience, and in Cincinnati it is put on preparation and continued professional growth.
- II. Six cities used a form made up of a few comprehensive terms. The Saint Louis form is typical of this group:

Practical Efficiency

Management of children

Instruction

Attention to details of school business

Professional Qualities

Scholarship

Professional interest and growth

Personal qualifications

- III. Five cities used a long list of unclassified items which ask general and particular information concerning the teacher, his preparation, success, and various abilities.
- IV. Nine cities used a long list of classified items. The Cleveland plan is typical of this group. There are from four to six particular

qualities listed under each main topic:

1. Teaching power
2. Executive power
3. personal influence
4. Professional sincerity
5. General culture.

Mr. Johnston's conclusion was that there existed no common agreement as to the elements that constitute efficiency or the comparative value of each. Experimentation should lead to a solution of the problem.

14

c. Edward C. Elliott reports the methods of determining teaching efficiency in some of the large cities of the United States. He discusses the question in relation to the problem of supervision in New York City. In that city there are four forms for rating:

1. Annual rating of teachers by district superintendent.
2. Semi-annual rating of teachers by principal.
3. Annual rating of principals by district superintendent.
4. Annual rating of assistants to principals by district superintendent.

The ratings presented on these forms by the several supervisory officers become a part of the teacher's permanent record.

The teachers are rated on instruction and discipline. The different ratings are Meritorious: A (highest) B+, B; Non-Meritorious: C (inferior), D (deficient). If a principal's estimate of a teacher's ability to instruct or to discipline is less than B, a detailed report is required of the two qualities. In that case instruction is subdivided into teaching ability, scholarship and effort; discipline is subdivided into personality, control of class, and self-control.

The form for the district superintendent's rating of principals includes a general rating and a detailed rating on thirteen qualities:

1. Effect of examinations and inspections.
2. Character and effect of conferences with teachers.
3. Guidance and assistance of weak teachers.
4. Judgment in assigning teachers to classes.
5. Discrimination in ratings of teachers.
6. Character of record kept (including statistics).
7. Interpretation of course of study and selection of text-books.
8. Grading and promotion of pupils.
9. Influence on school discipline and supervision of truancy.

10. Supervision of janitor's work.
11. Supervision of recesses, games, athletics, etc.
12. Cooperation with other principals using school premises.
13. Manners, conversation, conduct.

The form for the district superintendents' detailed rating of assistants to principals includes a list of five factors:

1. Effect of examinations and inspections.
2. Character and effect of conferences with teachers.
3. Guidance and assistance of inexperienced teachers.
4. Influence of discipline and suppression of truancy.
5. Supervision of recesses, games, etc.

New York City also makes use of a form for rating teachers who are adjudged to be of "superior merit". These teachers must be in their ninth or subsequent year of high school service. Written statements are required concerning the teacher's work in advancing students, methods of conducting lessons, success with bright and with backward pupils, social attitudes, moral influence, professional attitude, use of English, attention to details of school

business, and any service rendered to the school or students outside of school hours.

As supplementary to the discussion of the New York City system, Mr. Elliott presents without comparison and comment brief descriptions of the plans and methods for determining relative teaching efficiency in certain typical American cities.

1. Boston makes use of a system of promotional examinations.
2. In Chicago teachers whose marks have been "Good" are eligible for promotion. The marks are based on efficiency in teaching and upon having successfully passed a promotional examination in certain subjects, or having done certain work in some degree-giving institution.
3. Promotion in Cincinnati depends upon the successful completion of certain work in the University or summer school.
4. Cleveland promotion blanks ask for reports on:
 - a. Teaching power
 - b. Executive power
 - c. Personal influence
 - d. Professional sincerity
 - e. General culture.

5. Detroit uses a form with four main topics and subdivisions under each.
 - a. Management
 - b. Instructions
 - c. Spirit
 - d. Personal items
6. The Milwaukee form included a long list of unclassified items.
7. New Orleans requires a report on a number of topics, in question form, answerable by "Yes", "No", or a brief statement. There are a number of subtopics under the main topics:
 - a. General information
 - b. Teaching ability
 - c. Ability to control
 - d. Professional spirit
 - e. Education and general culture.
8. In Philadelphia the teachers are given a rating of "Satisfactory" or "Unsatisfactory". A detailed statement of instruction, discipline, records and co-operation is required concerning those teachers who are candidates for promotion or are unsatisfactory.
9. The Saint Louis principals report three times a year on the following topics:

- A. Practical Efficiency
 - 1. Management of children
 - 2. Instruction
 - 3. Attention to details of school business.
 - B. Professional Qualities
 - 4. Scholarship
 - 5. Professional interest and zeal
 - 6. Personal qualifications.
10. The detailed rating in Salt Lake City includes six factors:
- a. Teacher's scholarship
 - b. Tact with children
 - c. Application
 - d. Methods
 - e. Discipline
 - f. Attitude of pupils toward work.

The salary groups are determined from the marks the teachers receive in these factors. The marks are "A", excellent; "B", very good; "C", acceptable, satisfactory, "D", Fair; "U", Unsatisfactory.

11. The principal's report on teachers in Springfield, Massachusetts, includes a rating on three factors, instruction, discipline, and attention to details.

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d. Prof. Wm. C. Ruediger in a lengthy discussion of "Agencies for the Improvement of Teachers in Service", gives

a brief report on current practices of rating teachers in some of the cities of the United States.

In ascertaining merit of teachers two bases are used, (1) classroom efficiency, and (2) growth in professional knowledge as measured by promotional examinations. The first is often used without the second, but the second never without the first.

Prof. Ruediger outlines the rating plans of four cities which are not discussed elsewhere in this paper.

1. Decatur, Illinois, uses a detailed schedule for estimating a teacher's success:

- a. Physical aspect of school
- b. The teacher personally
- c. Adaptability
- d. Loyalty to school official
- e. Spirit of co-operation
- f. Attitude toward pupils
- g. Discipline and control in school
- h. Teaching skill
- i. Professional interest
- j. General impression

2. Lincoln Nebraska, uses a long list of unclassified items.

3. In Saginaw, Michigan, probationary teachers are rated on three points:

- a. Power to instruct
- b. Power to inspire ambition in pupils
- c. Power to secure moral conduct.

Other teachers are rated on (1) successful and satisfactory work and (2) completion of course of reading approved by committee. The rating is made on a scale of one hundred.

4. Washington D.C. rates teachers on five points:

- a. Ability to teach
- b. Ability to control
- c. Scholarship
- d. Community interest
- e. Executive ability

There are six degrees of excellency in this scheme, excellent, very good, good, fair, poor and very poor.

3. The Question of Self Rating

Practically all the authors of schemes for rating teachers have suggested that the greatest value of any such system for measurement is attained only as the individual teacher will measure himself by the standard and in that way discover his own weak points and seek to improve himself.

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Elliott says "The content basis of any teaching efficiency scheme should be the result of cooperative determination between the members of a teaching staff and the supervisors".

38

W. C. Ruediger, in an address before the Maryland State Teachers Association, November 27, 1917, contended that rating schemes have proved to be a source of irritation. His suggestion for meeting the situation is that rating schemes be in the hands of teachers themselves. They would then serve as a means for self-examination and as a basis of conference between teachers and supervisors. There are a few significant studies of the question of self-rating and definite schemes have been proposed.

a. "A Study in Self Appraisal" is reported by A.

18

Richandler.

There was an experiment in self-rating conducted in one of the New York City schools. The principal is required at the end of each term to rate every teacher under his supervision in instruction and discipline. There are five different ratings: Meritorious, A (Highest), B+, B; Non-meritorious, C (inferior) D (deficient).

After a discussion by the teachers as to the kind of work that would merit an A, they rated themselves. The auto ratings of sixteen out of thirty one were identical with those given them by the principal. Six young teachers rated themselves lower than they were rated by the principal in instruction. Six more experienced teachers rated themselves higher than the principal. No auto ratings in discipline were lower than those of the principal, while seven were higher. The principal discussed these auto ratings with the teachers, comparing them with the ratings he had given them. In only two cases was he impelled to change his original rating to that presented by the teachers.

Mr. Fichandler's conclusion is that if teachers' ratings are to serve any useful purpose, they should be the result of cooperative study on the part of teachers and supervisors. "Unless the teacher acknowledges the justice of the ratings they may become merely sources of irritation and unhappiness and consequently a cause of diminished efficiency".

b. G. C. Meyer³⁰ suggests that the teachers in a given school observe each other's work and then rate each other. This, he believes, would foster the democracy which Mr. Fichandler so vigorously champions.

c. "Supervisory and Self-Rating Score Card."

29
Ellsworth Lowry

Teaching merit as represented on this card is divided into two groups: I, Personal Qualities, and II, Teaching Ability. The main headings are subdivided into more definitive groups and these again into specific qualities. In the entire scheme the teacher is rated on eighty four factors.

There are four ratings for different degrees of merit, in each quality, ranging from highest to lowest, +3, +1, -1, -3+ For each quality there are four descriptive words which correspond to the four possible ratings, e.g., after the quality "Vitality" under "Physical Appearance", we have the descriptives "vigorous", "passable", "timid", and "weak". After the quality "Pleasing", under "Mental and Social Qualities" are the words "very", "tolerably", "unpleasing", and "displeasing". The teacher in rating himself checks the word which most nearly indicates his ability or characteristic in that quality.

The total score is found by multiplying the number of check marks in each column by the value at the top of the column and then getting the algebraic sum of the four products. While the total score will be of some value in

the use of this scheme, the feature which recommends it most highly is the very careful and minute self-analysis required of any one who attempts to rate himself with it.

The two main headings with the larger subheadings are given in Table VIII.

TABLE VIII.

I. Personal Qualities

- A. Physical Appearance
- B. Mental and Social Qualities
- C. Community and Professional Activities
- D. Literary and Professional Reading
- E. Recreation.

II. Teaching Ability as indicated by

A. Recitation

- 1. Teaching Activity
- 2. Pupil Activity
- 3. Use of Devices: Maps, Globes, etc.
- 4. Assignment
- 5. Study Period

There recently appeared a discussion of the question of self-examination as carried on by the English teachers in Cleveland Ohio.⁴⁴ These teachers are working toward self-improvement and are trying to accomplish it through self-measurement. "They have worked upon the theory that while the stimulation and constructive criticising of a

principal, a superintendent, a supervisor, or a head of a department may be of great potential value, no perceptible improvement can be actually made until the teacher by his own self-analysis becomes conscious of his own merits and defects."

Specific questions are suggested as an appropriate guide in this self-scrutiny. They fall under two general heads:

I. General Points in Personal Equipment.

The questions under this topic concern personal appearance, health, initiative, adaptability, attention to classroom conditions, faithfulness, discipline, frankness, sense of humor, and aim for pupils.

II. Special Equipment for English Teaching.

Under this head are found ten questions dealing with growth in study, reading, and ability to write and speak correct English, voice and enunciation, grammatical errors, knowledge of library, breadth of interests, knowledge of new mechanical aids, and current events.

The questions are all formed using the first person and begin with "Do I?", "Have I?", or "Am I?"

This effort of the teachers in one department of a large city school system toward self-improvement by self-examination is indicative of the trend among teachers of all classes.

CHAPTER IV
THE RATING OF PROSPECTIVE TEACHERS
IN COLLEGES AND UNIVERSITIES

1. HISTORICAL

While schemes and score cards for rating teachers in service have been rather widely discussed and are rapidly coming into usage, comparatively little has been done concerning the question of rating before the teacher enters the profession. There are certain minimum educational requirements required of all teachers in any locality. These requirements are met by the completion of certain prescribed courses of study, by the successful writing of an examination, or service for a specified length of time as a substitute teacher.

In addition to what can be learned from certificates and from transcripts of courses of study and grades, people who employ teachers are constantly asking college faculties to give their opinion concerning the students who have come under their instruction. The information received is frequently of a very general nature and is an individual matter with the one who write the recommendation.

As practice teaching has been introduced in colleges and universities which train teachers, various methods have been devised for rating the teachers in preparation. Bulletin 29, 1917, United States Bureau of Education ⁴⁵ gives a summary of the methods of rating work of practice teachers. The methods are grouped under four classes:

1. A general rating of "Satisfactory" or "Unsatisfactory" given at end of the period of practice teaching.
2. Regular letter-grade system of the institution.
3. Ratings made several times during practice with final summary at end of period.
4. Various analytical systems, in which each point on a score card is rated by some consistent plan. Several ratings are made during the period of practice with a final summary rating at the end. These schemes sometimes involve the weighting of different points included.

One of the best examples of such a scheme is the one proposed by H. A. Sprague. ⁴¹

- a. Score-Card for Rating Student Teachers in Training and Practice. H.A.Sprague ⁴¹

This score card is for the use of Supervisors of Practice Teaching in rating those who come under their direct observation. The main topics were adopted after inspecting the studies of Boyce, Moses, Ruediger and Strayer, Luther, Buellfield and Elliott. Sub-topics were outlined under each main topic with the aid of the above mentioned studies and were criticized repeatedly by experts. After a set form was decided upon, judgments were obtained as to the relative importance of the main topics and major sub-topics. Three hundred fifty three judges were asked to divide one thousand points among the main topics, then to distribute the points assigned a main topic among the minor topics. One hundred thirty of the score cards which were returned were complete enough to be used. The median scores in every case were changed to the nearest five and those taken as the final value of the qualities.

The topics and points assigned to each are given in Table IX.

TABLE IX

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Score-Card for Rating Student-Teachers in Training and Practice

	Total Points:	Poor	Fair	Good	Very Good	Excellent
I. Preparation	200	below 140	140-154	154-168	168-182	182-200
A. Lesson plans	95	" 66	66-73	73-80	80-87	87-95
B. Daily or weekly plans	50	" 35	35-39	39-43	43-47	47-50
C. Use of course of study	55	" 38	38-42	42-46	46-50	50-55
II. Teaching Skill	360	" 252	252-279	279-306	306-333	333-360
A. Stimulation of interest	90	" 63	63-70	70-77	77-84	84-90
B. Thought and Response	85	" 59	59-65	65-71	71-77	77-85
C. Drill	55	" 38	38-42	42-46	46-50	50-55
D. Economy of time	55	" 38	38-42	42-46	46-50	50-55
E. Results	75	" 52	52-58	58-64	64-72	72-75
III. Classroom Management	230	" 161	161-178	178-195	195-212	212-230
A. Organization of class	60	" 42	42-46	46-50	50-54	54-60
B. Care of room	45	" 31	31-34	34-37	37-40	40-45
C. Discipline	90	" 63	63-70	70-77	77-84	84-90
D. Clerical Work	35	" 24	24-27	27-30	30-33	33-35
IV. Personal Fitness	210	" 147	147-163	163-179	179-195	195-210
A. Physical	60	" 42	42-46	46-50	50-54	54-60
B. Progressive	50	" 35	35-39	39-43	43-47	47-50
C. Manners and morals	45	" 31	31-34	34-37	37-40	40-45
D. Social Fitness	55	" 38	38-42	42-46	46-50	50-55

There are five degrees of rating, poor, fair, good, very good, and excellent. The numerical value assigned to each degree of rating depends upon the maximum value of the quality to be rated, e.g., the maximum rating for preparation is two hundred. Any rating below 140 is Poor; from 140 to 154 is Fair; from 154 to 168 is Good; from 168 to 182 is Very Good, and from 182 to 200 is Excellent. The upper and lower limits for any rating are given for each quality. The total score is the sum of the separate scores on the several qualities.

b. Concerning the Rating of Prospective Teachers.

Wm. H. Kilpatrick²³ says:

1. "With the present state of knowledge quantitative measurements are not sufficient to furnish a satisfactory basis for the rating of prospective teachers.
2. "The best available rating is the judgment of the instructors expressed on the single item of the comparative promise of success of the several candidates.

"Note 1.- Let the candidates be grouped according to destination, as kindergartners, primaries, intermediate, etc.; let each instructor arrange the names in the several groups according to promise of success, all things considered. Let the appointment officer compile final rating lists, considering that

the judgments of the instructors are not necessarily of equal weight.

"Note 2, -As auxiliary information, useful to the appointment officer (1) in evaluating discordant judgments, (2) in adapting candidate to vacancy, and (3) in describing candidates to prospective employers, let each instructor also report on a convenient scale, such data regarding each candidate as (a) vigor, energy, initiative, (b) good sense, judgment, tact, (c) personality (including likableness and refinement), (d) knowledge of the subject matter in the instructors field, and (e) promise of growth.

3. "The practical judgment of the appointment officer is thus a necessary reliance (1) in compiling the several lists, (2) in comparing this year's graduates with their predecessors, and (3) in selecting the particular candidate for a specified place."

2. THE SCHEME PROPOSED BY THE TEACHER'S
APPOINTMENT COMMITTEE OF THE UNIVERSITY
OF KANSAS.

a. Description of Scheme.

The Teachers' Appointment Committee at the University of Kansas includes the Dean of the School of Education, two other Professors of Education and four Professors in other Departments. This committee serves very much as an employment agency for the members of the Senior Class who are seeking teaching positions. Previous to 1919, the prospective teachers have enrolled with the committee, giving a full account of work done in the University, stating personal qualifications, naming subjects in which special work has been done, and the type of position desired. They also give the names of several individuals who will give references as to their ability.

Great care has been exercised by the committee in collecting references and filling out confidential statements concerning the people enrolled. This material has been available then for Superintendents and representatives of Board of Education who came to the committee in search of teachers.

It has been the opinion of this committee that the information which could be given concerning any candidate was secured in a very unscientific and unsatisfactory manner. It was to be supposed that a prospective teacher would give as references only the names of such people as would write him a good recommendation. Quite often the chairman of the committee was unacquainted with many of the senior students. He could not give a very satisfactory statement concerning their abilities.

In consideration of these conditions, and in an effort to arrive at a more satisfactory method of rating prospective teachers by College faculties, the Appointment Committee at Kansas University has devised a new system of securing and recording ratings of the senior students who expect to teach. This system has been in operation this year, 1919. It was desired to perfect a system, simple enough in its workings that the cooperation of the several departments could be secured. It was further desired that the results could be recorded on a summary card which would give a very definite idea of the characteristics and qualifications of each individual, as judged by various departments or rating groups.

From a large list of factors which might be considered in judging the merits of prospective teachers, nine were chosen and carefully defined. The definitions are given on the back of the Summary Rating Card.

NAME, REVERSED

SUMMARY CARD
OF
STUDENT'S RATINGS

	MAJOR DEPT.	WEIGHTINGS	PRODUCTS	MINOR DEPT.	WEIGHTINGS	PRODUCTS	EDUCATION DEPT.	WEIGHTINGS	PRODUCTS	SUPERVISORS OF TEACHING	WEIGHTINGS	PRODUCTS	TOTALS OF PRODUCTS
I. Educational Factors:													
1. Native ability, 20 points.....		8			5			5			2		
2. Knowledge of subject matter, 20 points		10			4			4			2		
3. Ability to express thoughts, 10 points		3			2			2			3		
II. Professional Factors:													
4. Efficiency in classroom teaching, 15 points		0			0			0			15		
5. Faithfulness in performing duties, 10 points.		4			2			2			2		
6. Co-operation, 5 points.....		2			1			1			1		
III. Personal Factors:													
7. Physical vigor, 10 points.....		3			3			3			1		
8. Personal appearance, 5 points...		2			1			1			1		
9. Qualities of leadership, 5 points.		2			1			1			1		
IV. 10. Additions or subtractions.....													
Totals of Products.		34			19			19			28		

FORM NO. 809

(OVER)

Name, reversed

Date

Major Department.....No. hrs. in major, (a) H.S. Units?.....(b) College hrs.?.....

Minor Department.....No. hrs. in minor, (a) H.S. Units?.....(b) College hrs.?.....

Candidate for B.S. in Ed.?..... University Teachers' Diploma?.....State Certificate?.....

Interpretations of Ratings:

Rating 1, for students equal in the given factor to the poorest ¼ of senior students as they are found from year to year.

Rating 2, for those equal to the next poorest ¼ of senior students.

Rating 3, for those equal to the ¼ next below the best fourth.

Rating 4, for those equal to the best ¼ of senior students.

Definitions:

1. Native ability:—native intellectual endowment as distinguished from acquired abilities.
2. Knowledge of subject matter:—scope and mastery of essentials in academic and professional subjects.
3. Ability to express thoughts:—command of English, and clearness and forcefulness in oral expression.
4. Efficiency in classroom teaching:—skill in putting into practice sound principles of teaching, judged largely by results.
5. Faithfulness in performing duties:—general reliability, and sense of responsibility in relation to all matters, both social and professional.
6. Co-operation:—the spirit of congenial fellowship, and disposition to be interested in the enterprises of others, fairness in considering suggestions.
7. Physical vigor:—freedom from chronic ailments, strength enough to meet the demands upon teachers, energetic and even tempered.
8. Personal appearance:—pleasing face and figure and clothed in such fashion as likely to exert a wholesome influence over high school students in matters of dress.
9. Qualities of leadership:—independence, aggressiveness, and possession of initiative.
10. Any marked weakness or strength not covered in the nine points above should be called to the attention of the Appointment Committee.

(over)

Four departments are asked to rate each candidate,- the department in which the student has done his major work, the department in which he has done his minor work, the department of Education and the supervisors of practice teaching. The first three departments named make ratings in all of the qualities except the fourth, "Efficiency in classroom teaching". The Supervisors of Practice Teaching make ratings on all qualities. Each department rates as a department and submits its judgment on a Department Rating Sheet, (Form 810), independent of any other rating group.

The ratings used are "1", "2", "3", and "4", and defined on the sheet as follows: Rating 1, for students equal in the given factor to the poorest 1/4 of senior students as they are found from year to year; rating 2, for those equal to the next poorest 1/4 of senior students; rating 3, for those equal to the 1/4 next below the best fourth; rating 4, for those equal to the best 1/4 of senior students. In the long run, there should be as many students marked "1" as there are marked "2" or "3" or "4".

Since the four groups making ratings do not have the same opportunity of knowing the characteristics and qualifications of the students, they are not given the same weighting in determining the total score for the prospective teacher.

NAME, REVERSED

UNIVERSITY OF KANSAS
APPOINTMENT COMMITTEE

DEPARTMENT RATING SHEET

This rating is made by the
group underscored:Major Department
Minor Department
Education Department
Supervisors of Teaching

RATING

		<p>To the persons doing the rating:</p> <p>Please rate the student whose name is at the top of this sheet on each of the nine qualities listed at the left, (except "Efficiency in Classroom Teaching," which will be rated only by the supervisors of teaching). Use ratings "1", "2", "3", and "4", according to interpretations and definitions given on the back of this sheet.</p> <p>The success of this type of effort at the evaluation of a prospective teacher depends upon the faithful adherence of all parties to the common values assigned to the marks given. In the long run, there should be as many students marked "1" as there are marked "2" or "3" or "4". These ratings mean the successive fourths of senior students, "1" for the poorest fourth, and "4" for the best fourth.</p> <p>The members of the department concerned are asked to combine on a single rating for each of the qualities. Those ratings, properly weighted, will be combined with ratings similarly obtained from other departments concerned.</p> <p>Please write any general estimate you care to make in the blank space below.</p> <p>Respectfully yours,</p> <p>APPOINTMENT COMMITTEE, W. H. Johnson, Secy.</p>
1. Native ability		
2. Knowledge of subject matter.....		
3. Ability to express thoughts.....		
4. Efficiency in classroom teaching.....		
5. Faithfulness in performing duties.....		
6. Co-operation		
7. Physical vigor		
8. Personal appearance		
9. Qualities of leadership		
10. Additions or subtractions		

(SIGNED) _____

DEPARTMENT

(OVER)

Interpretations of Ratings:

Rating 1, for students equal in the given factor to the poorest $\frac{1}{4}$ of senior students as they are found from year to year.

Rating 2, for those equal to the next poorest $\frac{1}{4}$ of senior students.

Rating 3, for those equal to the $\frac{1}{4}$ next below the best fourth.

Rating 4, for those equal to the best $\frac{1}{4}$ of senior students.

Definitions:

1. Native ability:—native intellectual endowment as distinguished from acquired abilities.
2. Knowledge of subject matter:—scope and mastery of essentials in academic and professional subjects.
3. Ability to express thoughts:—command of English, and clearness and forcefulness in oral expression.
4. Efficiency in classroom teaching:—skill in putting into practice sound principles of teaching, judged largely by results.
5. Faithfulness in performing duties:—general reliability, and sense of responsibility in relation to all matters, both social and professional.
6. Co-operation:—the spirit of congenial fellowship, and disposition to be interested in the enterprises of others, fairness in considering suggestions.
7. Physical vigor:—freedom from chronic ailments, strength enough to meet the demands upon teachers, energetic and even tempered.
8. Personal appearance:—pleasing face and figure and clothed in such fashion as likely to exert a wholesome influence over high school students in matters of dress.
9. Qualities of leadership:—independence, aggressiveness, and possession of initiative.
10. Any marked weakness or strength not covered in the nine points above should be called to the attention of the Appointment Committee.

(over)

The points assigned to each factor were distributed among the four departments. The number of points given any department is termed the "weighting" of the department in that particular factor. For example, Native Ability is given a total value of 20 points. These twenty points are distributed, eight to the Major department, five to the Minor department, five to the Education department and two to the Supervisors of Practice Teaching. The distribution of the points assigned to the remaining eight qualities is given in the columns marked "Weightings" on the Summary Card (Form 809). The total weightings of the departments are - Major 34; Minor 19; Education 19; Supervisors of Teaching 28.

The rating of any department on a factor is multiplied by the "weighting" of that department on the factor, e.g., if the Major department rates a student "4" in Native ability, the rating is multiplied by eight, giving a product of thirty-two. If the Minor department gives a rating of four on the same factor, it is multiplied by five, giving a product of twenty. The sum of all the products on a score card is the Total Score of the

student being rated. It will be seen that a student rated "1" in every factor, by every department would receive a total score of 100 the poorest. A student rated "4" in the same way would receive a total score of 400, the best. Other students will range between 100 to 400.

b. Results of Questionnaire Letter.

An attempt was made to discover the merits and defects of the card by getting the combined judgments of a considerable number of educators who are interested in the rating of prospective teachers.

A questionnaire letter explaining the scheme and asking for cooperation was sent to the Chairman of the Teachers' Appointment committees of 218 Colleges and Universities scattered in all parts of the United States. From this list, sixty one replies were received, twenty of which offered no suggestions. Forty one replied with more or less valuable suggestions.

UNIVERSITY OF KANSAS

LAWRENCE

W. H. JOHNSON, Professor of Education, Chairman
MAY RIGGS, Clerk

F. J. KELLY, Dean, School of Education
U. G. MITCHELL, Associate Professor
of Mathematics
ELIZABETH SPRAGUE, Professor of Hon
Economics
A. T. WALKER, Professor of Latin

BUREAU OF APPOINTMENTS

February 15, 1919.

To Teachers Appointment Committee. in
American Colleges and Universities:

The Teachers Appointment Committee of the University of Kansas, in an attempt to arrive at an intelligible and accurate scheme for rating prospective teachers, has devised the card herewith enclosed. In making use of the card, the prospective teacher is given a rating on each of the nine factors by four departments, -the department in which he has done his major work, the department in which he has done his minor work, the Department of Education, and the Supervisors of Practice Teaching. The ratings are made on the enclosed blank form by each group working independently and are then copied on the card. The method of rating used is described on the back of the card.

Since it is evident that the four groups do not have equal opportunity to judge the various abilities and characteristics of the prospective teacher, the Appointment Committee has assigned different weightings to each department. The rating given to each factor is multiplied by the weighting of the department in that factor. The ratings and weightings are so distributed that teachers' total grades will range from 100 as the poorest to 400 as the best.

It has been the purpose of the committee to distribute the weightings in such a way that the total grade will indicate satisfactorily the teacher's rank. In addition to the total grade, the card will give detailed information as to the factors in which the teacher is strong or weak as judged by each rating group. We expect that this card will assist the Appointment Committee in making recommendations, and that it will also give superintendents and others employing teachers the information they desire.

The list of factors used and also the distribution of weightings are only tentative. They were arrived at by combining the judgments of a relatively small group. We expect to modify the card in the light of experience. We would like to modify it also in light of the combined judgments of a large number of people engaged in recommending teachers. Will you please aid us in this? We shall send you the summary of the judgments received if you care for it.

Answers to the following questions will give us the greatest aid. Indicate answers by changes on the enclosed card if convenient.

BARMAN TO YDEARVILLE

1. Realizing the need for simplicity, what changes, if any, would you make in the list of factors used in rating a prospective teacher by college faculty groups?

2. Out of a total of one hundred points, how many would you assign to each factor?

3. What groups or departments in the college would you have contribute to the final rating?

4. What weightings on each factor would you assign to each faculty group handing in ratings?

Thanking you for the courtesy of a reply at as early a date as possible, I am

Sincerely yours,

W. B. Johnson

Teachers Appointment Committee.

A stamped envelope is enclosed for your use.

Although this response is not what was desired, yet the answers have come from people who are actively engaged in recommending teachers and whose opinions are of considerable value in matters of this nature. Some few (three) expressed themselves as being unfavorable to any such scheme. A much larger proportion (thirty two) indicated their sincere approval of the scheme as an attempt to meet the needs of College and University Appointment Bureaus.

QUESTION I.

"Realizing the need for simplicity, what changes, if any, would you make in the list of factors used in rating a prospective teacher by college faculty group?"

There were twenty seven replies which considered the factors used. Fifteen of these indicate their agreement with the selection on the Summary Card, and make no change. The twelve remaining replies eliminated or redistributed the factors, or added others.

A. Criticisms and suggestions:

<u>Factor</u>	<u>Criticisms</u>
1	- was criticized severely by two correspondents.
2	- depends on factor 1
6	- involved in factor 5
7	- should be excluded
7 and 8	- overlap
8	- not satisfactory "Why not say neatness in personal attire?"
9	- involved in factor 1.

B. Other Factors Included No. of times Mentioned

1	- Sympathy	1
2	- Enthusiasm	1
3	- Voice	1
4	- Manner	1
5	- Initiative	1
6	- Ability to organize	1
7	- Character	3
	Moral interests	
8	- Social factors	5
	Extra curricular activities	
	Social adaptability	
	Social interests	
	Adaptability to environment	

It will be noticed that "initiative" is included in the definition of "Qualities of leadership".

The social factors which were mentioned oftenest and were discussed at greatest length are of great importance in the achieving of success in the teaching profession. The committee recognizes this fact but does not see how a rating on social factors would give a Superintendent or Board of Education the desired information. It is impossible to judge a teacher's value by a single rating on social factors. It would be necessary to indicate in what line of social qualities the rating was given. Social adaptability is largely included in "Cooperation" which is defined as "the spirit of congenial fellowship",

and disposition to be interested in the enterprises of others."

The results of the answers to Question I -

1. More than half the replies agree with the selection made by the K. U. Committee.
2. The additional factors which were mentioned are personal and social in their nature.

Question II -

"Out of a total of one hundred points, how many would you assign to each factor?"

There were twenty three definite replies to this question. The distribution of the values assigned, the median, the mean, and the range, are given in Table X.

The median in every case is the same as the value assigned on the card. The mean is above the median in the case of Factors 3, 4, 5, 6, 7, 8, and 9. The mean is below value on card in case of Factors 1 and 2.

Table X gives the frequency of the values assigned to each of the nine factors.

TABLE X.

Value	Factors								
Assigned	1	2	3	4	5	6	7	8	9
0	1								
1									
2									
3									
4									
5	1	1	2	1	1	17	6	18	14
6									
7						1	1	1	2
8						1		2	
9									
10	4		13	1	18	3	15		4
11									
12	1		1	1					
13		1			1				
14		1	1						
15	3	6	3	13	1		1		1
16									
17									
18									1
19						1			
20	12	11	2	4					
21					1				
22									
23									
24									
25	1	2		3					
26									
27									
28									
29									
30		1							
Median	20	20	10	15	10	5	10	5	
Mean	15.5	18.3	11.4	16.2	10.6	6.4	9.2	5.3	
Range	0-25	5-30	5-20	5-25	5-21	6-19	5-15		

There were a few answers which could not be tabulated. One correspondent suggests increasing "Efficiency in Teaching". Others suggest reducing "Native ability", increasing "Cooperation", and "The number of points should vary with the type of work".

QUESTION III.

"What groups or departments in the college would you have contribute to the final ratings?"

There were twenty responses to Question III. Sixteen indicate their agreement with the selection on the card and make no change.

Suggestions made by thirteen correspondents:

Additions:

1. "Have Dean's office rate on factors 7,8,9."
2. Get estimate of students if possible.
3. Dean of Women.
4. "Some branch of Administration to get line on business dealings and discipline."
5. "Have English department rate Factor 3", suggested by two.
6. "One other department, at choice of student."

Other suggestions:

7. Two would combine Education and Supervisor's rating.
8. "Omit Minor"
9. Have student choose which Minor department, in case there is more than one.
10. "All departments in which student has done work."
11. The teachers best qualified should do the rating.

Here again the agreement with the original selection is very marked. The suggestions made apply largely to groups

which could judge the student on qualifies other than educational.

QUESTION IV.

"What weightings on each factor would you assign to each faculty group handing in ratings?"

Only twelve answers were received from this question.

The results are given in TABLE XI.

TABLE XI.

Factor	MAJOR				MINOR				EDUCATION				SUPERVISORS			
	Weight signed by card	Returned weight- ing Median	Returned weight- ing Mean	Range	K.U.	Md.	M.	Range	K.U.	Md.	M.	Range	K.U.	Md.	M.	Range
1	8	8	7.2	4-8	5	5	4.8	3-5	5	5	5.2	2-10	2	2	2.6	1-8
2	10	10	10	5-15	4	4	4.09	3-6	4	4	4.	3-5	2	2	2.4	2-5
3	3	3	3.7	3-6	2	2	2.2	2-4	2	2	2.4	2-6	3	3	3.2	2-5
4	0	0	0	0	0	0	0	0	0	0	0	0	15	15	15.3	5-25
5	4	4	3.6	2-4	2	2	1.9	1-2	2	2	2	1-3	2	2	2.1	1-4
6	2	2	1.8	1-3	1	1	1.08	1-2	1	1	1.2	1-3	1	1	1.2	1-3
7	3	3	2.8	1-4	3	2.5	2.4	1-4	3	3	2.7	1-4	1	1	1.8	1-4
8	2	2	1.9	1-3	1	1	1	1	1	1	1	1	1	1	1.2	1-3
9	2	2	2.18	1-4	1	1	1.18	1-2	1	1	1.2	1-4	1	1.5	1.9	1-5

It will be noticed that the medians agree with the weightings on the card, except in the Minor departments weighting on factor 7, and the Supervisors' weighting on factor 9.

The mean is above the median in nineteen instances, equal to it in five, and below in nine. The mean of the weightings in the Supervisory column is higher in every instance than the median and the weighting suggested on the card. This fact shows a tendency on the part of these correspondents to lay greater emphasis on the ratings of the Supervisors of Practice Teaching.

c. The Rating Card as it was used at Kansas University.

About ninety candidates for teaching positions enrolled with the Kansas University Teachers' Appointment Committee early in the year 1919. The four groups indicated on the Summary Card of Students' Ratings were asked to rate these seniors on the nine qualities of merit. A few of these students had not pursued any course under one or more of the departments. Some of the departments failed to rate any of their senior students, and some failed to rate them on all the qualities. There were thirty four summary cards entirely completed. The parts of this study in which there is a discussion of the total scores will be concerned with that number of cards.

(1) Ratings by departments.

The number of students rated, the total number of marks and the percentages of each of the marks is given by departments in TABLE XII.

TABLE XII.

Percentages of Ratings by Departments

	Individuals Rated	Total No. Marks	4	3	2	1
Education	81	648	22.6	42.4	27.4	7.4
Supervisors	62	558	53.7	36.5	8.2	1.4
English	33	264	63.6	29.1	7.2	---
History	16	128	57.	36.7	3.9	2.3
German	14	112	36.6	31.2	16.	16.
Mathematics	10	80	38.7	36.2	18.7	6.2
Home Economics	8	64	53.1	23.4	10.9	12.5
Botany	6	48	47.9	43.7	8.3	---
French	6	48	68.7	25.	6.	---
Spanish	6	48	60.4	37.5	2.	---
Public Speaking	1	8	62.5	37.5	---	---
Sociology	1	8	25.	75.	---	---

The noticeable features of this table are the small percentages of low ratings and the large percentages of high ratings. More than ninety per cent of the ratings of three departments which rated upon sixteen to sixty two students are "3's" and "4's".

The only explanation that can be offered for this striking departure from the instructions given is that departments and instructors refuse to mark senior students low. As the ratings stand, they can mean very little. One would judge that a student rated "four" in any factor was considered by the department to rank high in that quality. There is no reason to believe that he stands in the best one-fourth because of the physical impossibility for from fifty to sixty per cent of the senior students to be grouped in the "best fourth".

Unless this source of error can be removed such a scheme of ranking will never be valid and the whole card will be useless. As departments become better acquainted with the system and its purpose, this error may remedy itself.

(2) Total scores.

The total scores of these thirty four cards are given in the following table:

TABLE XIII.

Range	Frequency
200-249	1
250-299	9
300-349	8
350-400	16
Total	34

(3) Variation in ratings.

A study of the ratings of the four groups as recorded on thirty four cards reveals both similarity and contrast. Table XIV shows the variations by factors in the ratings made by the four departments.

TABLE XIV.

Factor	No. Variation in ratings	Variation of one	Variation of two	Variation of three	Total
1	9	17	8	0	34
2	5	19	10	0	34
3	7	12	14	1	34
4	7	22	3	2	34
5	7	20	7	0	34
6	7	20	6	1	34
7	4	25	5	0	34
8	6	21	7	0	34
Total	52	156	60	4	272

This table is to be interpreted as follows:

Factor one was given the same ratings by all four of the rating groups on nine of the thirty four cards. These ratings were all "4's", all "3's", all "2's", or all "1's". In nearly every case where there was no variation, the ratings were "4's". "Variation of one" is to be interpreted as a range of one in the ratings of the four departments on one factor of one card. Under that heading are listed the number of cases in which the ratings were "1's" and "2's", "2's" and "3's", or "3's" and "4's". Seventeen of the thirty four cards have a variation of one on factor one. Under "Variation of two" are listed those ratings in which the range was from "1" to "3" or from "2" to "4". Eight cards have a variation of two in factor one. "Variation of three" means a range of from "1" to "4" on one factor of one card. No cards have a variation of three on factor one.

There seems to be no tendency toward closer agreement of the ratings on one factor than on any other.

Inspection of the summary cards shows a tendency of the departments to give the student about the same ranking on every factor. The rating groups are inclined to rate high all other factors if the student is rated high on factors one and two.

(4) Agreement of ratings on factors one and two.

A study was made of the agreement of the rating of the students by one department on factors one and two. It was found that the rating on factor one agrees with the rating on factor two in 104 instances, is less than factor two in twenty, and is greater in twelve. The variation in the ratings by the same department was never more than one.

(5) Agreement of ratings on factors five and six.

A similar study was made of the agreement of factors five and six. The rating on factor five agrees with the rating on factor six in 105 instances, is less in eleven, and is greater in twenty. The difference is never more than one.

(6) Coefficients of Correlation.

The number of summary cards completed makes any coefficient of correlation that might be obtained of very doubtful value. However, in order to discover any possible indication of relationship, a study was made of a few of the more important items.

Pearson's method of "grades" for determining the coefficient of correlation was used. In this method

$$r = 2 \sin\left(\frac{\pi}{6} \rho\right) \text{ where } \rho = 1 - \frac{6SD^2}{N(N_2-1)}$$

The following correlations were obtained:

Total score with score on native ability, $r = .9173$

Total score with score on knowledge

of subject matter, $r = .8705$

These correlations are very high. They add another proof to the assertion that students ratings throughout the entire nine qualities tend to agree with the ratings on factors one and two.

Twenty six of the senior students whose summary cards were complete were given the Army Intelligence Test, Alpha. By Pearson's method of "grades", two correlations were obtained:

Score on Alpha test and Native Ability, $r = .8230$

Score on Alpha test and Total Score, $r = .6775$

(7) Rankings in six groups.

Table XV gives the rankings of the thirty four students under six headings:

1. The total score on the summary card
2. The total score given by the student's major department.
3. The total score given by the student's minor department.
4. The total score given by the department of education.

5. The total score given by the Supervisors
of Practice Teaching.

6. The number of hours of credit that are
I's, A's, and B's.

Note: The grade "I" means a grade of 90 or above.
This scheme of grading in which there were three grades
above failure was used at Kansas University during the first
two years of the college course of these thirty four sen-
iors. The scheme now in use is a five point system with
four grades above failure. "A" and "B" are the two highest
grades in this scheme.

TABLE XV.

Ranks of Thirty four Seniors

Student	Total	Major	Minor	Education	Supervisors	Hours I, A and B
1	1.5	4	3	4	3	1
2	1.5	4	3	4	3	2
3	3	4	6	2	6.5	3
4	4	10	3	7.5	9.5	5.5
5	5	4	3	14.5	14	14.5
6	6	4	24.5	7.5	3	8
7	7	16	14	9	9.5	7
8	8	10	11	18.5	9.5	5.5
9	9	13	15.5	16.5	12.5	23
10	10.5	4	18	13	15.5	12
11	10.5	8	9.5	22.5	6.5	24.5
12	12	4	3	12	20.5	10.5
13	13	17	7.5	21.5	3	14.5
14	14	10	15.5	14.5	17	10.5
15	15	23	27	1	3	13
16	16	13	9.5	18.5	20.5	31
17	17	19	18	10	18	19
18	18	13	12.5	33	15.5	18
19	19	31	12.5	6	12.5	29
20	20	17	21	11	22.5	9
21	21	24	7.5	4	30.5	4
22	22	15	21	20	26	22
23	23	26	28	16.5	9.5	30
24	24	22	18	21.5	30.5	16
25	25	20.5	26	26	28.5	28
26	26	29	23	30.5	19	32
27	27	27.5	24.5	28	27	20
28	28	24.5	30.5	27	26	34
29	29	20.5	34	25	26	26.5
30	30	33	29	30.5	32	33
31	31	32	32	30.5	28.5	24.5
32	32	30	21	23.5	33	26.5
33	33	27.5	33	34	22.5	21
34	34	34	30.5	30.5	34	17

(8) Method of rating of one department.

In one of the large departments of the university, the several instructors in the department were asked to rate the senior students who had pursued courses under them. From these separate ratings the ratings of the department were obtained. It was found that three instructors rated forty prospective teachers. A study of these ratings reveals much the same characteristics as a study of different departments.

The marks given by the three instructors on the nine factors with totals and percentages are given in the following table:

TABLE XVI.

	1	2	3	4	5	6	7	8	9	Total	Percentages
4's	30	29	38		45	49	38	27	27	284	29.6
3's	54	54	48		46	39	52	45	45	384	40.
2's	23	25	23		21	24	21	34	32	201	20.9
1's	13	12	11		8	8	9	14	16	91	9.4

The ratings made by the three instructors individually with totals and percentages are given in Table XVII.

TABLE XVII.

INSTRUCTOR A.

	1	2	3	4	5	6	7	8	9	Total	Percentages
4's	12	13	14		12	15	12	12	10	100	31.2
3's	13	14	15		12	10	10	9	13	96	30.
2's	9	7	5		11	11	12	12	11	78	24.3
1's	6	6	6		5	4	6	7	6	46	13.7

INSTRUCTOR B.

4's	9	11	17		24	24	14	8	11	118	36.8
3's	17	13	10		11	9	20	16	13	109	34.
2's	9	11	10		3	4	4	12	10	63	19.7
1's	5	5	3		2	3	2	4	6	30	9.3

INSTRUCTOR C.

4's	9	5	7		9	10	12	8	6	66	20.6
3's	24	27	23		23	21	22	20	19	179	55.9
2's	5	7	8		7	8	5	9	11	60	19.7
1's	2	1	2		1	1	1	3	4	15	4.6

d. The rating card used at Coe College.

Through the kindness of Prof. A. C. Robbie of the Department of Education of Coe College, and the cooperation of nine other departments in the college, twenty two Coe College seniors, prospective teachers, were rated on the same score card used at Kansas University. Nineteen of the students were rated by their major and minor departments and by the education department. Three were rated by the education and one other department. There is no practice teaching at Coe College, hence no ratings from that group.

The rating groups were instructed to classify their students in fourths and place their judgments on Department Rating Sheets. The judgments were later recorded on Summary Cards.

Table XVIII gives by departments the number of individuals rated, the total number of ratings made, and the percentages of the different ratings. The striking features of this table are the few ratings of "one" and the high percentage of "threes" and "fours". The exception to the general trend of ratings is the Economics department which recorded no fours and more than thirty per cent ones.

Correlations were determined between the total ratings of major, minor and education departments and between each department and the total scores of the students. Pearson's

method of "grades" was used:

TABLE XVIII.

	Total Number of Marks	No. Indi- viduals rated	4	3	2	1
Education	176	22	25	47.7	26.1	1.7
History	72	9	44.4	50.	5.5	0
English	56	7	50.	30.3	17.8	1.7
Economics	56	7	---	44.6	25.	30.3
Mathematics	32	4	9.3	59.3	31.2	0
Psychology	32	4	62.5	37.5	---	---
Latin	24	3	83.3	16.6	---	---
Spanish	24	3	29.1	50.	20.8	---
German	16	2	6.25	37.5	37.5	18.75
Home Economics	8	1	12.5	87.5	---	---

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Major and Total .7557

Minor and Total .6775

Education and Total .6180

Major and Minor .2091

Major and Education .4056

Minor and Education .2195

There were three individuals whose ranks by different departments were markedly different:

	Rank in Major	Rank in Minor	Rank in Education	Rank in Total
No. 7	4	19	3	10
No. 11	14	2	12	8
No. 14	18	1	1	6

These are the greatest causes of the low correlation between major and minor departments and between minor and education departments. It should be mentioned here that the few individuals rated make any correlation obtained of very doubtful value.

A study was made to determine the agreement of the ratings of the major and minor departments. Each department rated the nineteen students on eight qualities of merit, making a total of 304 ratings. The major department's rating was greater than the minor's rating in seventy three cases, equal to it in forty four cases, and less in thirty four cases.

The variation of the ratings of the two departments by factors is given in Table XIX.

TABLE XIX.
Variations of ratings of Major and Minor Departments.

Factor	1	2	3	4	5	6	7	8	9	Total
Ratings the same	6	5	7	--	7	4	7	6	4	46
Variation of one	12	10	8	--	5	10	9	10	13	77
Variation of two	0	3	3	--	3	2	22	2	2	17
Variation of three	1	1	1	--	4	3	1	1	0	12
Total	19	19	19	--	19	19	19	19	19	152

There are no certain factors which are rated equal by the two departments. The factors which have the widest range of variation are numbers five and six, faithfulness in performing duties and cooperation.

Table XX shows the different ratings received by the eight factors.

TABLE XX.

Factor:	4	3	2	1	Total:
1	17	33	12	1	63
2	23	28	10	2	63
3	28	27	15	2	63
4	--	--	--	--	--
5	34	18	6	5	63
6	21	28	7	7	63
7	18	31	10	4	63
8	21	28	12	2	63
9	11	28	23	1	63
Total	164	221	95	24	504
Percent	32.5	43.8	18.8	4.7	

In the rating of nineteen students by three departments and three students by two departments, the rating given factor one, native ability, agrees with factor two, knowledge of subject matter in forty five cases. It is larger than factor two in six cases and smaller in twelve.

The variation is only one in every case. This seems to indicate in the same way as the results at Kansas University that native ability and knowledge of subject matter are closely related.

CHAPTER V.

SUMMARY AND CONCLUSIONS.

The results of this study permit the statement of very few exact conclusions. A brief summary follows:

1. Teacher rating is an existing supervisory duty. Superintendents are using varied schemes for recording the merit of teachers, many of which have been very unscientific.
2. Studies of qualities of merit and causes of failure among teachers support the contention that there are certain very definite factors which are closely related to teaching success. These factors are not of equal value.
3. The general testimony of those who have studied the question carefully is in favor of some analytical scheme of rating which assigns a definite value to each quality to be measured. Such a scheme, to be of greatest use, must be simple enough to admit of easy rating and yet of sufficient detail to give an accurate measurement of the teacher's ability.

4. Numerous schemes have been devised for use of superintendents and teachers. There is no apparent tendency toward any uniform scheme.
5. Any rating scheme that is used must be in the hands of the teacher as well as the superintendent if it is to serve in teacher improvement.
6. The rating of prospective teachers in colleges and universities which train teachers is an existing practice concerning which very little scientific study has been made. There should be a careful study of the factors which indicate future success in teaching and the comparative value of those factors. Experiment is necessary to determine the best scheme for recording these factors.
7. In the scheme for rating prospective teachers, introduced at Kansas University, an attempt was made to get at a scientific method for rating prospective teachers. In making use of this scheme for the first time there was great difficulty in getting useful ratings from the different departments. The ratings submitted

were inaccurate. Because of that fault the ratings of one department were not comparable with those of another. A new method of ranking or closer adherence to the plan indicated on the card is absolutely necessary.

8. The whole question of teacher rating must be the subject of more scientific study and cooperative experiment if the problem is to be solved.

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